

DYNAMICALLY VARIABLE FREQUENCY SELECTIVE SURFACE**ABSTRACT OF THE DISCLOSURE**

Method for dynamically varying a frequency response of a frequency selective surface. The method can include controlling transmission of electromagnetic energy through a frequency selective surface by passing selected frequencies in a pass-band and blocking selected frequencies in a stop-band. The stop-band and the pass-band can be dynamically modified by controlling at least one of a position and a volume of a conductive fluid that forms a portion of the frequency selective surface. According to one aspect of the method, the conductive fluid can be selected to include gallium and indium alloyed with a material selected from the group consisting of tin, copper, zinc and bismuth.